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10/025,904	12/26/2001	Yong Ik Bang	8733.525.00	7612
30827	7590	01/16/2004		
MCKENNA LONG & ALDRIDGE LLP 1900 K STREET, NW WASHINGTON, DC 20006				
			EXAMINER RUDE, TIMOTHY L	
			ART UNIT 2871	PAPER NUMBER

DATE MAILED: 01/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/025,904	BANG ET AL.	
	Examiner	Art Unit	
	Timothy L Rude	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 5 and 13-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-12 and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of species F (claims 17-20 with claims 1-4 and 6-12 generic) in Paper No. 20031027 is acknowledged. It is respectfully pointed out, contrary to Applicant's response, the number of species that may be rejoined upon allowance of a generic claim is not presently limited to two species (please see election requirement, paper No. 4, page 4); rather, the species rejoined are a function of what a given allowed claim is generic to.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Shimada et al (Shimada) USPAT 5,877,830.

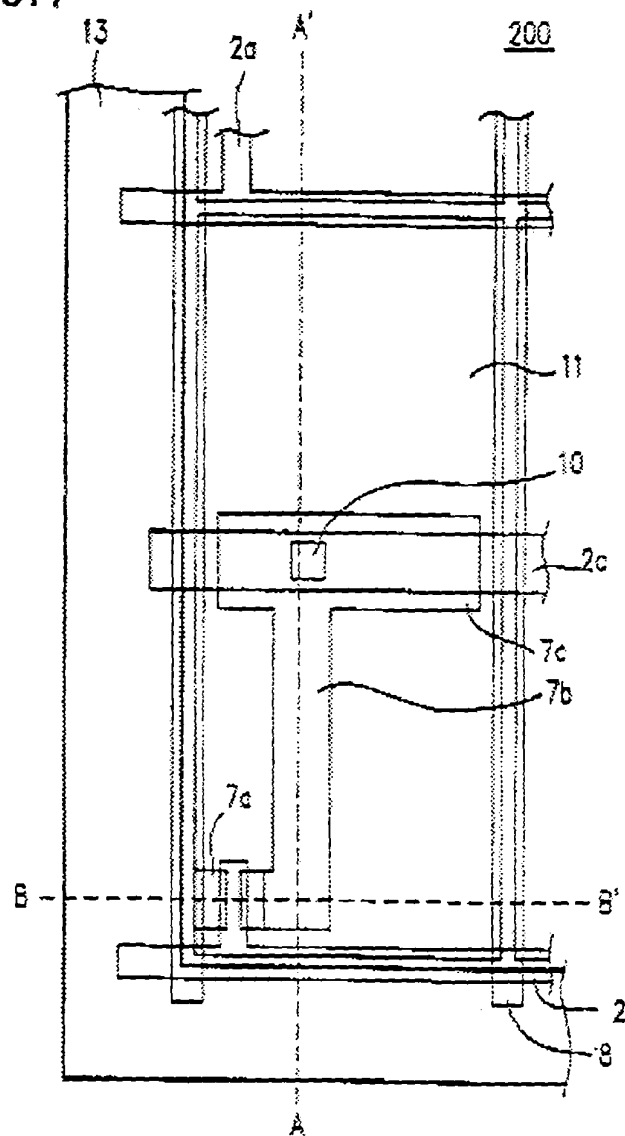
As to claim 1, Shimada discloses (Title, Abstract, entire patent) a liquid crystal display (LCD) panel comprising:

a first substrate provided with a plurality of gate, 2, and data, 8, lines, the gate lines being arranged to cross the data lines to define a plurality of pixel regions in a matrix

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arrangement; a second substrate provided with a black matrix layer (col. 5, lines 50-60) to shield portions other than the pixel regions from light; and liquid crystal layer injected between the first and second substrates, wherein the pixel regions in a peripheral portion of the matrix arrangement has an aperture ratio lower than that of the pixel regions in other portions of the matrix arrangement (col. 6, lines 35-45) in the example where the black matrix overlaps the pixel electrodes, 11.

FIG. 1

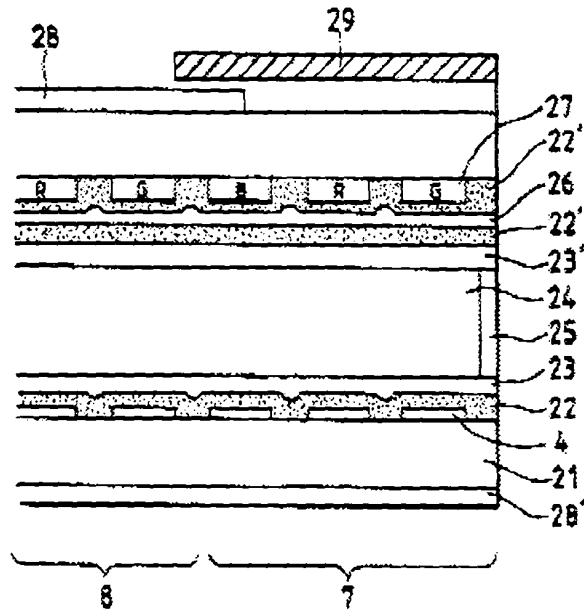


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3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Sono et al (Sono) USPAT 5,513,028.

As to claim 1, Sono discloses (Title, Abstract, entire patent) a liquid crystal display (LCD) panel comprising:
a first substrate provided with a plurality of gate and data lines, the gate lines being arranged to cross the data lines to define a plurality of pixel regions in a matrix arrangement; a second substrate provided with a shield plate, 29 (Applicant's black matrix layer), to shield portions other than the pixel regions from light; and liquid crystal layer injected between the first and second substrates, wherein the pixel regions in a peripheral portion of the matrix arrangement has an aperture ratio lower than that of the pixel regions in other portions of the matrix arrangement due to shielding.

FIG. 5



Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

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under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimada.

As to claim 2, Shimada discloses the panel above.

Shimada does not explicitly disclose a panel wherein a first gate line among the gate lines has a greater width than widths of the other gate lines so as to allow the pixel regions in the peripheral portion to obtain an aperture ratio lower than that of the pixel regions in the other portions.

Shimada teaches use of dummy lines as well as the actual gate and data lines as suitable for setting the aperture of the peripheral pixels (col. 2, line 45-60).

Shimada is evidence that ordinary workers in the art of liquid crystals would find the reason, suggestion, or motivation to add a first gate line among the gate lines has a greater width than widths of the other gate lines so as to allow the pixel regions in the peripheral portion to obtain an aperture ratio lower than that of the pixel regions in the other portions as an art recognized means suitable for setting the aperture of the peripheral pixels.

Therefore, it would have been obvious to one having ordinary skill in the art of liquid crystals at the time the invention was made to modify the LCD of Shimada with a

first gate line among the gate lines has a greater width than widths of the other gate lines so as to allow the pixel regions in the peripheral portion to obtain an aperture ratio lower than that of the pixel regions in the other portions of Shimada as an art recognized means suitable for setting the aperture of the peripheral pixels (MPEP 2144.07 and 2144.01).

5. Claims 2-4, 6-12 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sono.

As to claim 2, Sono discloses the panel above.

Sono does not explicitly disclose a panel wherein a first gate line among the gate lines has a greater width than widths of the other gate lines so as to allow the pixel regions in the peripheral portion to obtain an aperture ratio lower than that of the pixel regions in the other portions.

Please note: in considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom (MPEP 2144.01).

Sono teaches the periphery may be shaded by dummy areas, a circuit element, a wiring, or by the combination thereof (col. 7, lines 38-50) as suitable for setting the aperture of the peripheral pixels. Sono is considered ample teaching to suggest the setting of a line width for purposes of adequate overlap to achieve desired shielding.

Sono is evidence that ordinary workers in the art of liquid crystals would find the reason, suggestion, or motivation to add a first gate line among the gate lines has a greater width than widths of the other gate lines so as to allow the pixel regions in the peripheral portion to obtain an aperture ratio lower than that of the pixel regions in the other portions as an art recognized means suitable for setting the aperture of the peripheral pixels.

Therefore, it would have been obvious to one having ordinary skill in the art of liquid crystals at the time the invention was made to modify the LCD of Sono with a first gate line among the gate lines has a greater width than widths of the other gate lines so as to allow the pixel regions in the peripheral portion to obtain an aperture ratio lower than that of the pixel regions in the other portions of Sono as an art recognized means suitable for setting the aperture of the peripheral pixels (MPEP 2144.07).

As to claim 3, Sono discloses the liquid crystal display panel of claim 1.

Sono does not explicitly disclose a panel wherein a first data line or a last data line among the data lines has a greater width than widths of the other data lines so as to allow the pixel regions in the peripheral portion to obtain an aperture ratio lower than that of the pixel regions in the other portions.

Please note: in considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom (MPEP 2144.01).

Sono teaches the periphery may be shaded by dummy areas, a circuit element, a wiring, or by the combination thereof (col. 7, lines 38-50) as suitable for setting the aperture of the peripheral pixels. Sono is considered ample teaching to suggest the setting of a line width for purposes of adequate overlap to achieve desired shielding.

Sono is evidence that ordinary workers in the art of liquid crystals would find the reason, suggestion, or motivation to optimize the results effective variable wherein a first data line or a last data line among the data lines has a greater width than widths of the other data lines so as to allow the pixel regions in the peripheral portion to obtain an aperture ratio lower than that of the pixel regions in the other portions.

Therefore, it would have been obvious to one having ordinary skill in the art of liquid crystals at the time the invention was made to modify the LCD of Sono with a first data line or a last data line among the data lines has a greater width than widths of the other data lines so as to allow the pixel regions in the peripheral portion to obtain an aperture ratio lower than that of the pixel regions in the other portions as an art recognized means suitable for setting the aperture of the peripheral pixels (MPEP 2144.07).

As to claim 4, Sono discloses the liquid crystal display panel of claim 1.

Sono does not explicitly disclose a panel wherein the black matrix layer corresponding to at least one of a first gate line, a first data line and a last data line has a greater width than widths of the black matrix layer corresponding to the other portions

so as to allow the pixel regions in the peripheral portion to obtain an aperture ratio lower than that of the pixel regions the other portions.

Please note: in considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom (MPEP 2144.01).

Sono teaches the periphery may be shaded by dummy areas, a circuit element, a wiring, or by the combination thereof (col. 7, lines 38-50) as suitable for setting the aperture of the peripheral pixels. Sono is considered ample teaching to suggest the setting of a black matrix width for purposes of adequate overlap to achieve desired shielding.

Sono is evidence that ordinary workers in the art of liquid crystals would find the reason, suggestion, or motivation to optimize the results effective variable wherein a black matrix layer corresponding to at least one of a first gate line, first data line or a last data line among the data lines has a greater width than widths of the black matrix layer corresponding to the other portions so as to allow the pixel regions in the peripheral portion to obtain an aperture ratio lower than that of the pixel regions the other portions.

Therefore, it would have been obvious to one having ordinary skill in the art of liquid crystals at the time the invention was made to modify the LCD of Sono by optimizing the results effective variable wherein a black matrix layer corresponding to at least one of a first gate line, first data line or a last data line among the data lines has a greater width than widths of the black matrix layer corresponding to the other portions so as to allow the pixel regions in the peripheral portion to obtain an aperture ratio lower

than that of the pixel regions the other portions to achieve desired shielding and aperture ratio in the periphery (MPEP 2144.07).

As to claim 6, Sono discloses the liquid crystal display panel of claim 1.

Sono does not explicitly disclose a panel wherein an aperture ratio of the pixel regions in the peripheral portion is about 10-15% lower than aperture ratios of the pixel regions at the other portions.

Sono discloses restriction of the aperture of the peripheral portion as a results effective variable to avoid light leakage.

Sono is evidence that ordinary workers in the art of liquid crystals would find the reason, suggestion, or motivation to optimize the results effective variable to an aperture ratio of the pixel regions in the peripheral portion is about 10-15% lower than aperture ratios of the pixel regions at the other portions to avoid unwanted light leakage.

Therefore, it would have been obvious to one having ordinary skill in the art of liquid crystals at the time the invention was made to modify the LCD of Sono with an aperture ratio of the pixel regions in the peripheral portion is about 10-15% lower than aperture ratios of the pixel regions at the other portions to avoid unwanted light leakage (MPEP 2144.05 II B).

As to claims 7 and 10, Sono discloses an liquid crystal display panel comprising: a plurality of gate lines arranged in one direction at constant intervals; a plurality of data lines arranged at constant intervals be substantially perpendicular to the gate lines to

define a plurality of pixel regions in a matrix arrangement; and a plurality of pixel electrodes, wherein one pixel electrode is in each pixel region, per above.

Sono does not explicitly disclose a panel wherein the pixel electrodes at a peripheral portion of the matrix arrangement are narrower than the pixel electrodes at other portions of the matrix arrangement.

Please note: in considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom (MPEP 2144.01).

Sono teaches the pixel electrode lies within (or slightly overlaps) the gate line, data line, and black matrix to comprise a display with good aperture ratio and no peripheral light leakage.

Sono is evidence that ordinary workers in the art of liquid crystals would find the reason, suggestion, or motivation to set the pixel width narrow in accord with the narrower opening in the peripheral pixels of Sono above, to comprise a display with good aperture ratio and no peripheral light leakage.

Therefore, it would have been obvious to one having ordinary skill in the art of liquid crystals at the time the invention was made to modify the LCD of Sono with the pixel electrodes at a peripheral portion of the matrix arrangement are narrower than the pixel electrodes at other portions of the matrix arrangement to comprise a display with good aperture ratio and no peripheral light leakage.

As to claim 8, Sono discloses the liquid crystal display panel of claim 7.

Sono does not explicitly disclose a panel wherein a first gate line among the gate lines has a greater width than widths of the other gate lines.

Please note: in considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom (MPEP 2144.01).

Sono teaches the periphery may be shaded by dummy areas, a circuit element, a wiring, or by the combination thereof (col. 7, lines 38-50) as suitable for setting the aperture of the peripheral pixels. Sono is considered ample teaching to suggest the setting of a line width for purposes of adequate overlap to achieve desired shielding.

Sono is evidence that ordinary workers in the art of liquid crystals would find the reason, suggestion, or motivation to add a first gate line among the gate lines has a greater width than widths of the other gate lines so as to allow the pixel regions in the peripheral portion to obtain an aperture ratio lower than that of the pixel regions in the other portions as an art recognized means suitable for setting the aperture of the peripheral pixels.

Therefore, it would have been obvious to one having ordinary skill in the art of liquid crystals at the time the invention was made to modify the LCD of Sono with a first gate line among the gate lines has a greater width than widths of the other gate lines so as to allow the pixel regions in the peripheral portion to obtain an aperture ratio lower than that of the pixel regions in the other portions of Sono as an art recognized means suitable for setting the aperture of the peripheral pixels (MPEP 2144.07).

As to claim 9, Sono discloses the liquid crystal display panel of claim 7.

Sono does not explicitly disclose a panel wherein a first data line or a last data line among the data lines has a greater width than widths of the other data lines.

Please note: in considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom (MPEP 2144.01).

Sono teaches the periphery may be shaded by dummy areas, a circuit element, a wiring, or by the combination thereof (col. 7, lines 38-50) as suitable for setting the aperture of the peripheral pixels. Sono is considered ample teaching to suggest the setting of a line width for purposes of adequate overlap to achieve desired shielding.

Sono is evidence that ordinary workers in the art of liquid crystals would find the reason, suggestion, or motivation to optimize the results effective variable wherein a first data line or a last data line among the data lines has a greater width than widths of the other data lines so as to allow the pixel regions in the peripheral portion to obtain an aperture ratio lower than that of the pixel regions in the other portions.

Therefore, it would have been obvious to one having ordinary skill in the art of liquid crystals at the time the invention was made to modify the LCD of Sono with a first data line or a last data line among the data lines has a greater width than widths of the other data lines so as to allow the pixel regions in the peripheral portion to obtain an aperture ratio lower than that of the pixel regions in the other portions as an art recognized means suitable for setting the aperture of the peripheral pixels (MPEP 2144.07).

As to claims 11 and 12, Sono discloses an liquid crystal display panel, comprising:

a first substrate provided with a plurality of gate and data lines, the gate lines being arranged to cross the data lines to define a plurality of pixel regions in a matrix arrangement; a second substrate provided with a black matrix layer to shield portions other than the pixel regions from light; and a liquid crystal display layer injected between the first and second substrates above.

Sono does not explicitly disclose a panel wherein the black matrix layer corresponding to at least one of a first gate line, first data line and a last data line among the data lines has a greater width than portions of the black matrix layer corresponding to other gate or data lines respectively.

Please note: in considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom (MPEP 2144.01).

Sono teaches the periphery may be shaded by dummy areas, a circuit element, a wiring, or by the combination thereof (col. 7, lines 38-50) as suitable for setting the aperture of the peripheral pixels. Sono is considered ample teaching to suggest the setting of a black matrix width for purposes of adequate overlap to achieve desired shielding.

Sono is evidence that ordinary workers in the art of liquid crystals would find the reason, suggestion, or motivation to optimize the results effective variable wherein a

black matrix layer corresponding to at least one of a first data line and a last data line among the data lines has a greater width than portions of the black matrix layer corresponding to other gate or data lines so as to allow the pixel regions in the peripheral portion to obtain an aperture ratio lower than that of the pixel regions the other portions.

Therefore, it would have been obvious to one having ordinary skill in the art of liquid crystals at the time the invention was made to modify the LCD of Sono by optimizing the results effective variable wherein a black matrix layer corresponding to at least one of a first data line and a last data line among the data lines has a greater width than portions of the black matrix layer corresponding to other gate or data lines so as to allow the pixel regions in the peripheral portion to obtain an aperture ratio lower than that of the pixel regions the other portions to achieve desired shielding and aperture ratio in the periphery (MPEP 2144.07).

As to claims 17 and 18, Sono discloses an liquid crystal display panel, comprising:
first and second substrates; a plurality of gate and data lines arranged on the first substrate to define a plurality of pixel regions, the gate lines crossing the data lines, a plurality thin film transistors in a crossing portion of a respective gate line and a respective data line; a plurality of pixel electrodes, wherein at least one pixel electrode is in each pixel region; and a black matrix pattern formed on the second substrate shield portions other than the pixel electrodes from light, wherein width of a first gate line

among the gate lines is greater than widths of other gate lines, width of one of a first data line and a last data line among the data lines is greater than widths of other data lines, and width of portions the black matrix pattern corresponding to one of the first gate line, the first data line and the last data line is greater than widths of portions of the black matrix pattern not corresponding to the one of the first gate line, the first data line, and the last data line as rejected above.

As to claim 19, Sono discloses the liquid crystal display panel of claim 17.

Sono does not explicitly disclose a panel wherein the pixel electrodes at a peripheral portion of the matrix arrangement are narrower than the pixel electrodes at other portions of the matrix arrangement.

Please note: in considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom (MPEP 2144.01).

Sono teaches the pixel electrode lies within (or slightly overlaps) the gate line, data line, and black matrix to comprise a display with good aperture ratio and no peripheral light leakage.

Sono is evidence that ordinary workers in the art of liquid crystals would find the reason, suggestion, or motivation to set the pixel width narrow in accord with the narrower opening in the peripheral pixels of Sono above, to comprise a display with good aperture ratio and no peripheral light leakage.

Therefore, it would have been obvious to one having ordinary skill in the art of liquid crystals at the time the invention was made to modify the LCD of Sono with the pixel electrodes at a peripheral portion of the matrix arrangement are narrower than the pixel electrodes at other portions of the matrix arrangement to comprise a display with good aperture ratio and no peripheral light leakage.

As to claim 20, Sono discloses the liquid crystal display panel of claim 17.

Sono does not explicitly disclose a panel wherein an aperture ratio of the pixel regions in the peripheral portion is about 10-15% lower than aperture ratios of the pixel regions at the other portions.

Sono discloses restriction of the aperture of the peripheral portion as a results effective variable to avoid light leakage.

Sono is evidence that ordinary workers in the art of liquid crystals would find the reason, suggestion, or motivation to optimize the results effective variable to an aperture ratio of the pixel regions in the peripheral portion is about 10-15% lower than aperture ratios of the pixel regions at the other portions to avoid unwanted light leakage. Therefore, it would have been obvious to one having ordinary skill in the art of liquid crystals at the time the invention was made to modify the LCD of Sono with an aperture ratio of the pixel regions in the peripheral portion is about 10-15% lower than aperture ratios of the pixel regions at the other portions to avoid unwanted light leakage (MPEP 2144.05 II B).

Please note: reducing the aperture ratio of the peripheral pixels by numerous means is well known in the art of liquid crystals for purposes of eliminating unwanted light leakage (loss of contrast) in the peripheral region caused by surrounding structure, peripheral electric fields, seal contamination of liquid crystal material, peripheral distortion of the cell gap, etc. Applicant is encouraged to provide rationale for considering any specific structure novel over obvious methods of reducing aperture ratio as broadly taught by the prior art.

References cited but not applied are relevant to the instant Application.

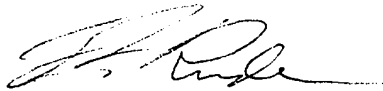
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy L Rude whose telephone number is (703) 305-0418. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H Kim can be reached on (703) 305-3492. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4900.



Timothy L Rude
Examiner
Art Unit 2871

TLR



ROBERT H. KIM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800